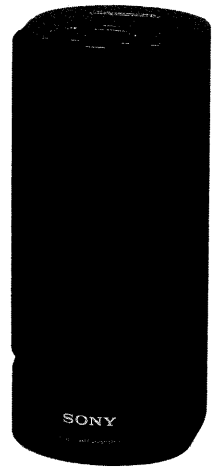
SRS-88PC

SERVICE MANUAL

US Model



SPECIFICATIONS

AUDIO POWER SPECIFICATIONS

POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 8 ohm loads, both channels driven, from 60 – 20,000 Hz; rated 8 watts per channel minimum RMS power, with no more than 10% total harmonic distortion.

Other Specifications

Power output	10W + 10W (at 10 % harmonic distortion, 1 kHz)
Input	Speaker cord equipped with stereo miniplug (1.5 m)
Input impedance	47 kohms (at 1 kHz)
Output	Minijack

Speaker section

System	Full-range, bass-reflex enclosure type
Speaker unit	Full range (magnetically shielded) : ø65 mm (ø$2^5/_8$ in.)
Nominal impedance	8 ohms
Sensitivity	87 dB/W/m

General

Where purchased	Power requirements	Power consumption
The United States	120 V AC, 60 Hz	23 W

Dimensions	Approx. 100 × 235 × 125 mm (w/h/d) (4 × $9^3/_8$ × 5 in.) incl. projecting parts and controls
Weight	Approx. 1,500 g (3 lb. 5 oz.) per speaker
Supplied accessories	Connecting cord (1) Plug adaptor (1)
Optional accessories	Extension cord RK-G131 (stereo miniplug ↔ stereo minijack, 3m), RK-C111 (two phonojacks ↔ two phonoplugs, 1.5 m) System selector SB-15 (four inputs/two outputs with stereo minijacks)

Your dealer may not handle some of the above listed optional accessories. Please ask the dealer for detailed information.

Design and specifications subject to change without notice.

STEREO ACTIVE SPEAKER SYSTEM

SONY®

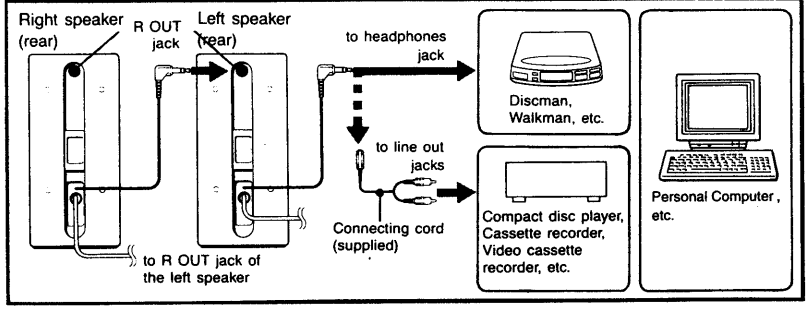
Features

The Sony SRS-88/SRS-88PC are compact-size speaker system with a buit-in power amplifier. It can be connected to a Discman, Walkman*, personal computer, etc.

- Power output of 10 W + 10 W (at 10 % harmonic distortion)
- DES (Dynamic Equalizing Sound) circuit enables you to obtain powerful bass and clear treble, regardless of the volume setting.
- The "folding bass refrex system" assures a rich and powerful bass.
- The magnetically shielded unit has little effect on a TV screen or recorded tapes, etc. placed near the unit.

*Walkman is a trademark of Sony Corporation.

Connections


Right speaker (rear)
R OUT jack
Left speaker (rear)
to headphones jack
Discman, Walkman, etc.
to line out jacks
Connecting cord (supplied)
Compact disc player, Cassette recorder, Video cassette recorder, etc.
Personal Computer, etc.
to R OUT jack of the left speaker

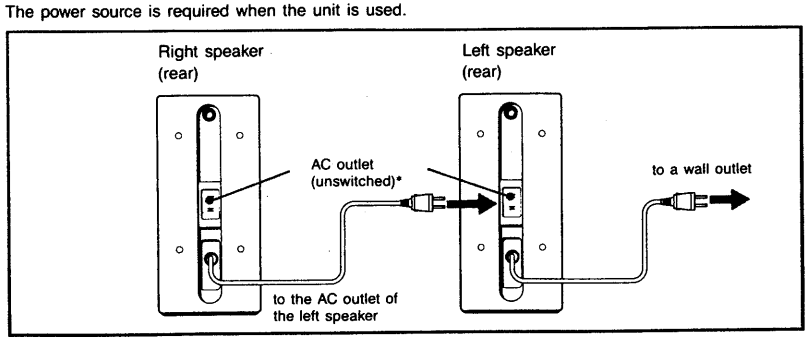
- The sound of a left channel is heard from the speaker connected to the sound source. Be sure to place it on the left.
- No signal is output from the R OUT jack of the right speaker.

Connection to a stereo phone-type headphones jack
Use the supplied plug adaptor.

Connection to a monaural mini jack
The sound may only be heard from the left speaker if the speakers are connected to a monaural jack of the sound source.
Use the optional PC-236MS plug adaptor.

Power Requirements

The power source is required when the unit is used.



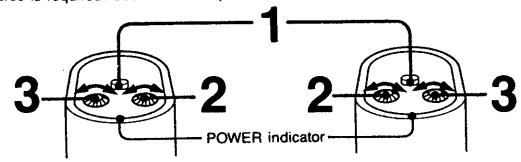
* • The unswitched AC outlets remain live, independently of the POWER switch setting, at all time when the unit is connected to the AC power supply.

• The AC outlet can supply AC power to equipment with a power consumption of less than 100 watts. When the speakers are connected as illustrated, connect only the equipment whose power consumption does not exceed 100 watts less whatever wattage is consumed by the speaker itself.

For the customers in the United Kingdom
This model is not equipped with the AC outlet at the rear. Connect the AC power cords of both speakers to wall outlets.

Operation

The power source is required. See "Power requirements".



1 Depress the POWER switch on each speaker to ON.
The POWER indicator will light up.

2 Adjust the volume with the VOLUME control on each speaker.

3 Adjust the sound with the DES control on each speaker.

To Adjust the Volume

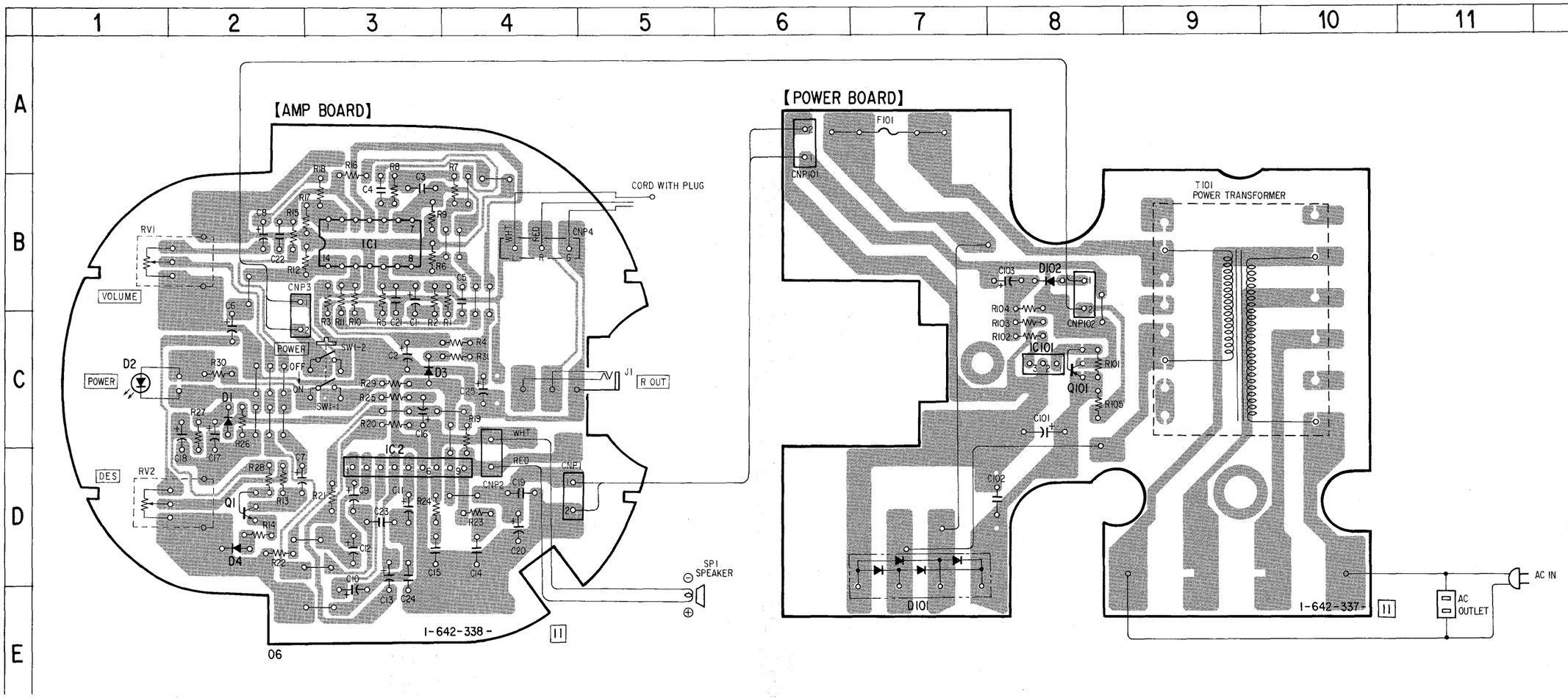
Before playing the connected equipment, set the VOLUME control on the speaker to MAX, then set the volume control on the connected equipment to a medium position. Start playing the connected equipment and adjust the volume to your preference: use the VOLUME control on the speaker to turn down the volume, or use the volume control on the connected equipment to turn up the volume.

For powerful bass and clear treble
Turn the DES control clockwise (to MAX) to obtain powerfull bass and clear treble. When turning up the VOLUME control while keeping the DES control near to MAX, low sound distortion may occur. In this case, turn the DES control to MIN.

This section is extracted from instruction manual.

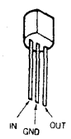
SECTION 2
DIAGRAMS

2-1. PRINTED WIRING BOARDS

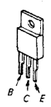


2-2. SEMICONDUCTOR LEAD LAYOUTS

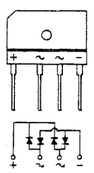
M5237L



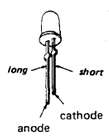
2SB1370-EF



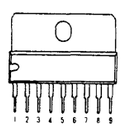
D3SBA10



HLMP-3950

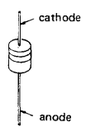


TDA2007



2SC2458L-GR

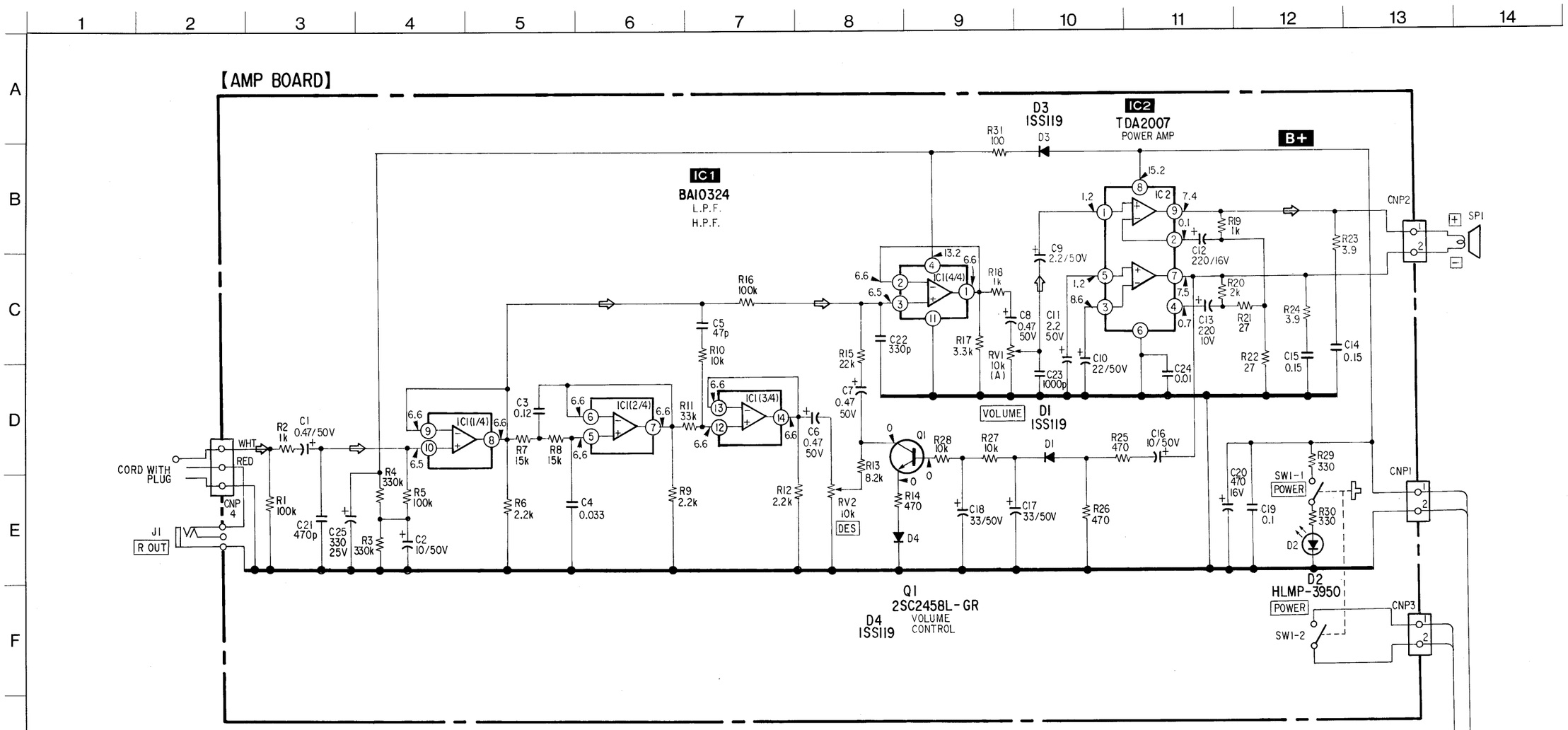
1SS119

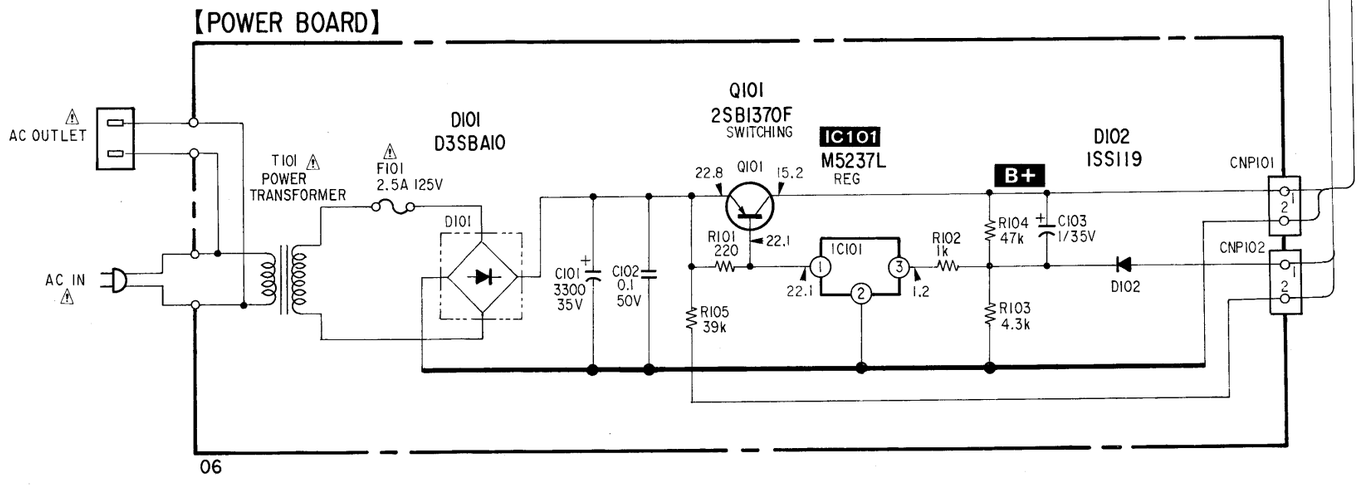


Note:

- ○—— : parts extracted from the component side.

2-3. SCHEMATIC DIAGRAM





Note:

- All capacitors are in μF unless otherwise noted. pF: μμF 50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4W or less unless otherwise specified.
- **B+** : B+ line.
- Voltage and waveforms are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM. (Input impedance 10MΩ) Voltage variations may be noted due to normal production tolerances.
- Signal path.
  ⇨ : Signal line

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

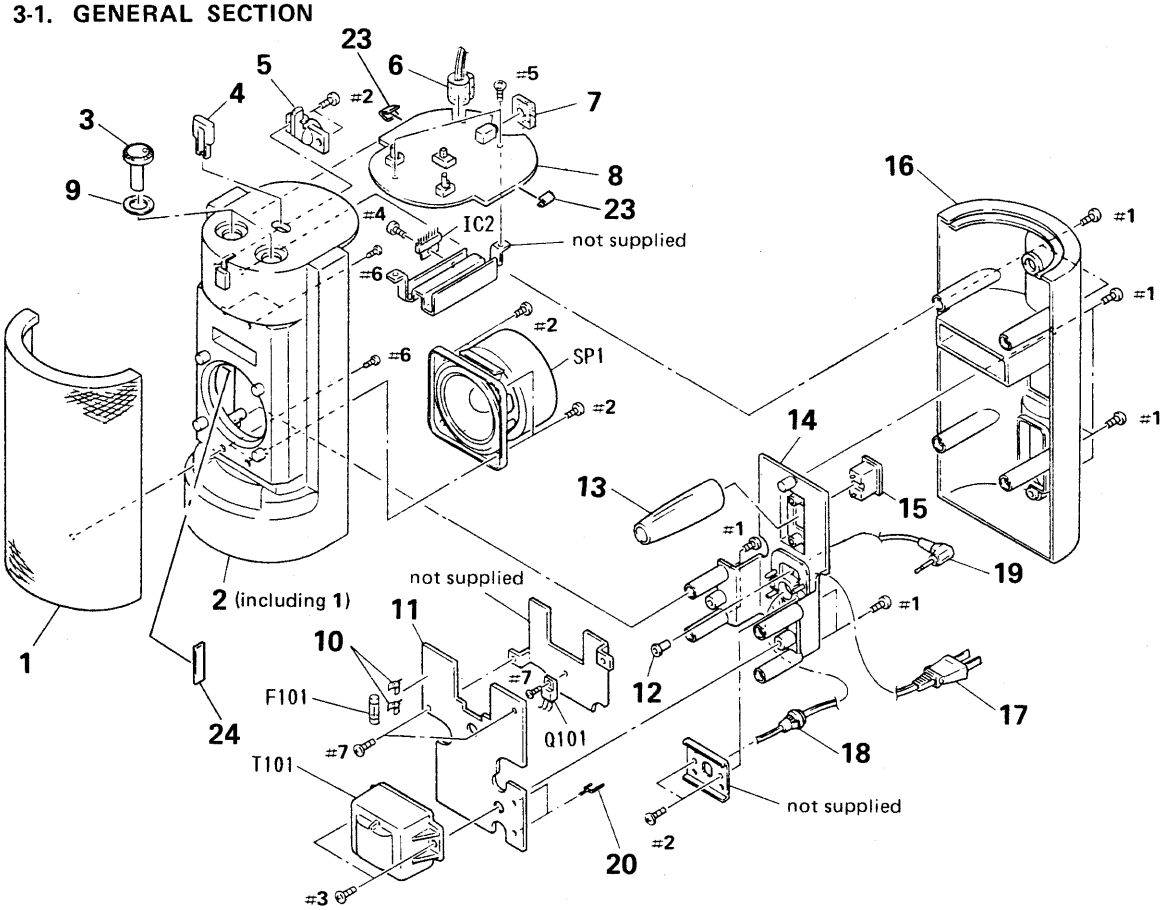
SECTION 3
EXPLODED VIEW

NOTE:

- -XX,-X mean standardized parts, so they may have some difference from the original one.
- Color indication of Appearance Parts.
  Example:
  KNOB,BALANCE (WHITE) . . . (RED)
  ↑ Parts Color ↑ Cabinet's Color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list is given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

3-1. GENERAL SECTION



Ref. No.	Part No.	Description	Remark
2	X-4942-827-1	PANEL ASSY, FRONT	
3	4-949-746-11	KNOB, VOLUME	
4	4-949-745-11	BUTTON, POWER SWITCH	
* 5	4-949-747-01	PLATE, LIGHT GUIDE	
6	9-911-815-03	CUSHION (CORD)	
7	9-911-815-02	CUSHION (JACK)	
* 8	A-4542-090-A	AMP BOARD, COMPLETE	
* 9	4-951-608-11	CUSHION (VOLUME)	
10	1-533-225-11	HOLDER, FUSE	
* 11	1-642-337-11	POWER BOARD	
* 12	2-143-903-01	BUSHING, CABLE	
* 13	2-122-867-11	COVER, OUTLET	
* 14	4-949-744-31	HOLDER	
*⚠15	1-526-938-11	OUTLET, AC	

Ref. No.	Part No.	Description	Remark
16	4-949-742-11	CABINET, REAR	
⚠17	1-551-478-12	CORD, POWER	
18	2-391-455-01	BUSHING (CM-22C)	
19	1-558-605-11	CORD (WITH PLUG)	
* 20	1-535-688-11	TERMINAL	
23	3-831-441-11	CUSHION, CABINET UPPER 10X7X0.5	
* 24	3-703-044-26	LABEL, CAUTION	
⚠F101	1-532-744-11	FUSE, GLASS TUBE 2.5A	
SP1	1-544-591-11	SPEAKER	
⚠T101	1-450-642-11	TRANSFORMER, POWER	

AMP

SECTION 4
ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the part specified in the diagrams or the components used on the set.
- -XX,-X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms
  METAL : Metal-film resistor
  METAL OXIDE : Metal Oxide-film resistor
  F : nonflammable
- Items marked "＊" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case,u : μ ,for example :
  uA... : μA..., uPA... : μPA...,
  uPB... : μPB..., uPC... : μPC...,
  uPD... : μPD...
- CAPACITORS
  uF : μF
- COILS
  uH : μH

When indicating parts by reference number, please include the board name.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref.No.	Part No.	Description			Remark
*	A-4542-090-A	AMP BOARD, COMPLETE			
		**********			
	7-682-545-09	SCREW +B 3X4			
	7-682-647-09	SCREW +PSW 3X6			
		< CAPACITOR >			
C1	1-124-902-00	ELECT	0.47uF	20%	50V
C2	1-124-915-11	ELECT	10uF	20%	63V
C3	1-130-496-00	MYLAR	0.12uF	5%	50V
C4	1-130-489-00	MYLAR	0.033uF	5%	50V
C5	1-101-880-00	CERAMIC	47PF	5%	50V
C6	1-124-902-00	ELECT	0.47uF	20%	50V
C7	1-124-902-00	ELECT	0.47uF	20%	50V
C8	1-124-902-00	ELECT	0.47uF	20%	50V
C9	1-124-925-11	ELECT	2.2uF	20%	100V
C10	1-126-233-11	ELECT	22uF	20%	50V
C11	1-124-925-11	ELECT	2.2uF	20%	100V
C12	1-126-923-11	ELECT	220uF	20%	10V
C13	1-126-923-11	ELECT	220uF	20%	10V
C14	1-130-497-00	MYLAR	0.15uF	5%	50V
C15	1-130-497-00	MYLAR	0.15uF	5%	50V
C16	1-124-915-11	ELECT	10uF	20%	63V
C17	1-126-966-11	ELECT	33uF	20%	50V
C18	1-126-966-11	ELECT	33uF	20%	50V
C19	1-161-772-11	CERAMIC	0.1uF	10%	25V
C20	1-126-935-11	ELECT	470uF	20%	16V
C21	1-162-290-31	CERAMIC	470PF	10%	50V
C22	1-162-288-31	CERAMIC	330PF	10%	50V
C23	1-162-294-31	CERAMIC	0.001uF	10%	50V
C24	1-161-379-00	CERAMIC	0.01uF	20%	25V
C25	1-126-940-11	ELECT	330uF	20%	25V

Ref.No.	Part No.	Description				Remark
		< CONNECTOR >				
* CNP1	1-569-974-11	PIN, CONNECTOR (PC BOARD) 3P				
* CNP2	1-569-974-11	PIN, CONNECTOR (PC BOARD) 3P				
* CNP3	1-569-974-11	PIN, CONNECTOR (PC BOARD) 3P				
* CNP4	1-535-116-00	TERMINAL				
		< DIODE >				
D1	8-719-911-19	DIODE 1SS119				
D2	8-719-023-06	DIODE HLMP-3950 (POWER)				
D3	8-719-911-19	DIODE 1SS119				
D4	8-719-911-19	DIODE 1SS119				
		< IC >				
IC1	8-759-938-12	IC BA10324				
IC2	8-759-985-06	IC TDA2007				
		< JACK >				
J1	1-507-777-00	JACK, SMALL TYPE (R OUT)				
		< TRANSISTOR >				
Q1	8-729-205-83	TRANSISTOR 2SC2458L-GR				
		< RESISTOR >				
R1	1-249-441-11	CARBON	100K	5%	1/4W	
R2	1-249-417-11	CARBON	1K	5%	1/4W	
R3	1-247-891-00	CARBON	330K	5%	1/4W	
R4	1-247-891-00	CARBON	330K	5%	1/4W	
R5	1-249-441-11	CARBON	100K	5%	1/4W	
R6	1-249-421-11	CARBON	2.2K	5%	1/4W	
R7	1-249-431-11	CARBON	15K	5%	1/4W	
R8	1-249-431-11	CARBON	15K	5%	1/4W	
R9	1-249-421-11	CARBON	2.2K	5%	1/4W	

Ref.No.	Part No.	Description			Remark
R10	1-249-429-11	CARBON	10K	5%	1/4W
R11	1-249-435-11	CARBON	33K	5%	1/4W
R12	1-249-421-11	CARBON	2.2K	5%	1/4W
R13	1-249-428-11	CARBON	8.2K	5%	1/4W
R14	1-249-413-11	CARBON	470	5%	1/4W
R15	1-249-433-11	CARBON	22K	5%	1/4W
R16	1-249-441-11	CARBON	100K	5%	1/4W
R17	1-249-423-11	CARBON	3.3K	5%	1/4W
R18	1-249-417-11	CARBON	1K	5%	1/4W
R19	1-249-417-11	CARBON	1K	5%	1/4W
R20	1-247-838-00	CARBON	2K	5%	1/4W
R21	1-249-398-11	CARBON	27	5%	1/4W
R22	1-249-398-11	CARBON	27	5%	1/4W
R23	1-249-388-11	CARBON	3.9	5%	1/6W
R24	1-249-388-11	CARBON	3.9	5%	1/6W
R25	1-249-413-11	CARBON	470	5%	1/4W
R26	1-249-413-11	CARBON	470	5%	1/4W
R27	1-249-429-11	CARBON	10K	5%	1/4W
R28	1-249-429-11	CARBON	10K	5%	1/4W
R29	1-249-411-11	CARBON	330	5%	1/4W
R30	1-249-411-11	CARBON	330	5%	1/4W
R31	1-249-405-11	CARBON	100	5%	1/4W
		< VARIABLE RESISTOR >			
RV1	1-241-411-11	RES, VAR, CARBON 10K (VOLUME)			
RV2	1-237-979-11	RES, VAR, CARBON 10K (DES)			
		< SWITCH >			
S1	1-570-797-31	SWITCH, PUSH (1 KEY) (POWER)			
**********					
*	1-642-337-11	POWER BOARD			
		**********			
	1-533-225-11	HOLDER, FUSE			
*	1-535-688-11	TERMINAL			
	7-682-547-04	SCREW +P 3X6			
		< CAPACITOR >			
C101	1-126-954-11	ELECT	3300uF	20%	35V
C102	1-161-063-00	CERAMIC	0.1uF	10%	50V
C103	1-131-347-00	TANTALUM	1uF	10%	35V
		< CONNECTOR >			
* CNP101	1-569-974-11	PIN, CONNECTOR (PC BOARD) 3P			
* CNP102	1-569-974-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D101	8-719-025-17	DIODE	D3SBA10-4100		
D102	8-719-911-19	DIODE	1SS119		

Ref.No.	Part No.	Description			Remark
		< IC >			
IC101	8-759-632-07	IC M5237L			
		< TRANSISTOR >			
Q101	8-729-924-90	TRANSISTOR 2SB1370-EF			
		< RESISTOR >			
R101	1-249-409-11	CARBON	220	5%	1/4W
R102	1-249-417-11	CARBON	1K	5%	1/4W
R103	1-247-846-11	CARBON	4.3K	5%	1/4W
R104	1-249-437-11	CARBON	47K	5%	1/4W
R105	1-249-436-11	CARBON	39K	5%	1/4W
**********					
		MISCELLANEOUS			
		**********			
*⚠15	1-526-938-11	OUTLET, AC			
⚠17	1-551-478-12	CORD, POWER			
19	1-558-605-11	CORD (WITH PLUG)			
⚠F101	1-532-744-11	FUSE, GLASS TUBE 2.5A			
SP1	1-544-591-11	SPEAKER			
⚠T101	1-450-642-11	TRANSFORMER, POWER			
**********					
		ACCESSORIES & PACKING MATERIALS			
		**********			
⚠	1-566-410-22	ADAPTOR, PLUG			
⚠	1-566-494-21	ADAPTOR, PLUG			
	3-754-615-22	MANUAL, INSTRUCTION (ENGLISH)			
*	4-950-733-01	CUSHION			
*	4-950-734-01	SPACER			
*	4-953-762-01	INDIVIDUAL CARTON			
	9-910-999-33	INSTRUCTION (ENGLISH)			
**********					

****
HARDWARE LIST
****

#1	7-685-647-79	SCREW +P 3X10 TYPE2 NON-SLIT
#2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S
#3	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S
#4	7-682-545-09	SCREW +B 3X4
#5	7-682-647-09	SCREW +PSW 3X6
#6	7-685-534-19	SCREW +BTP 2.6X8 TYPE2 N-S
#7	7-682-547-04	SCREW +P 3X6

Note : The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-957-273-11

Sony Corporation
General Audio Group

English
92F0609-1
Printed in Japan
©1992.6
Published by Customer Relations and Service Group